

What is claimed is:

- 1 1. A method for adjusting the traffic carried by a network, including:
2 determining a quality of service requirement with respect to a first
3 type of information carried by the network;
4 determining the performance of the network with respect to the first
5 type of information;
6 if the performance of the network does not meet the quality of service
7 requirement for the first type of information, then formulating a
8 network status message based upon the network status message and
9 the performance of the network, wherein the network status message
10 is adapted to instruct an end-user terminal to change the way in which
11 the end-user terminal sends information to the network; and
12 sending the network status message to an end-user terminal.
- 1 2. The method of claim 1, wherein the end-user terminal is a wireless appliance.
- 1 3. The method of claim 2, wherein the wireless appliance is a wireless
2 telephone handset.
- 1 4. The method of claim 1, wherein the first type of information includes
2 electronic mail information.
- 1 5. The method of claim 1, wherein the first type of information includes world
2 wide web information.
- 1 6. The method of claim 1, wherein the first type of information includes video
2 information.

- 1 7. The method of claim 1, wherein the first type of information includes a
2 digital electronic file.
- 3 8. The method of claim 1, wherein the network status message instructs the
4 end-user terminal to change the rate at which the terminal sends information to the
5 network.
- 1 9. The method of claim 1, wherein the network status message instructs the
2 end-user terminal to change the compression scheme used by the terminal to
3 compress information that the terminal sends to the network.
- 1 10. The method of claim 1, wherein the network status message instructs the
2 end-user terminal to send information to the network by specifying at least one from
3 the group of: the rate at which the end-user terminal can send a second type of
4 information to the network, the compression scheme that the end-user terminal is to
5 use for the first type of information, and a type of information that the end-user
6 terminal is permitted to send to the network.
- 1 11. The method of claim 1, wherein formulating the network status message
2 based upon the performance of the network and the quality of service requirement
3 with respect to the first type of information includes determining if the network can
4 meet the quality of service requirement for the first type of information.
- 1 12. The method of claim 11, wherein if the network cannot meet the quality of
2 service requirement for the first type of information, then formulating the network
3 status message to instruct the terminal to decrease the rate at which the terminal
4 sends at least one type of information other than the first type to the network.
- 1 13. The method of claim 11, wherein if the network cannot meet the quality of
2 service requirement for the first type of information, then formulating a network

1 status message to instruct the terminal to change the compression scheme used in
2 sending information of a type other than the first type to the network.

1 14. The method of claim 11, wherein if the network cannot meet the quality of
2 service requirement for the first type of information, then formulating a network
3 status message to instruct the terminal to change the compression scheme used in
4 sending the first type of information to the network.

1 15. The method of claim 1, wherein a wireless terminal is coupled to the network
2 when the wireless terminal registers with the network, and wherein sending a
3 network status message includes forming a network status message, addressing the
4 message to a wireless terminal, and transmitting the message to the wireless
5 terminal, and wherein a network status message is only addressed and transmitted to
6 a wireless terminal when the wireless terminal is coupled to the network.

1 16. The method of claim 1, wherein the network is partitioned into a plurality of
2 cells, wherein a wireless terminal belongs to a cell, and further including the steps of
3 selecting a subset of cells and sending the network status message only to wireless
4 terminals that belong to one of the selected subset of cells.

1 17. The method of claim 1, further including the steps of identifying a source of
2 network congestion, and sending a network status message that reduces the amount
3 of the second type of information originating from a wireless terminal substantially
4 at the identified source of network congestion.

1 18. The method of claim 1, wherein sending the network status message includes
2 broadcasting a network status flag to wireless terminals coupled to the network.

1 19. The method of claim 1, wherein sending the network status message includes
2 multicasting a network status flag to wireless terminals coupled to the network.

1 20. The method of claim 1, wherein the quality of service requirement is a
2 maximum latency measurement for a first type of information sent over the network.

1 21. The method of claim 1, wherein the first type of information is voice
2 information, and wherein the quality of service requirement for voice information
3 includes a maximum error rate for voice transmissions delivered over the network.

1 22. A system for assuring the quality of service delivered by a network for a
2 preferred type of information, comprising:
3 means for determining a preferred type of information for the network;
4 means for determining a quality of service requirement for the preferred type
5 of information;
6 means for determining the performance of the network with respect to the
7 preferred type of information; and
8 means for changing a parameter by which non-preferred information is sent
9 to the network by an end-user terminal coupled to the network when the
10 network cannot meet the quality of service requirement for the preferred
11 information.

1 23. An apparatus for adjusting the traffic sent to a network from an end-user
2 terminal, comprising:
3 a processor;
4 a memory coupled to said processor, said memory storing network status
5 manager instructions adapted to be executed by said processor to identify a
6 quality of service requirement for a preferred type of information carried by
7 the network, determine the quality of service with which the network is
8 delivering the preferred type of information, formulate a message to an end-
9 user terminal coupled to the network to change a parameter by which the
10 end-user terminal sends information to the network.

11 24. The apparatus of claim 23, wherein a parameter by which the end-user
12 terminal sends information to the network identifies the rate at which the end-user
13 terminal sends a type of information to the network.

1 25. The apparatus of claim 23, wherein a parameter by which the end-user
2 terminal sends information to the network identifies the compression technique used
3 for a type of information sent to the network.

1 26. The apparatus of claim 23, wherein a parameter by which the end-user
2 terminal sends information to the network identifies a type of information that the
3 end-user terminal is permitted to send to the network.

1 27. The apparatus of claim 23, wherein a parameter by which the end-user
2 terminal sends information to the network identifies a type of information that the
3 end-user terminal is not permitted to send to the network.

1 28. A digital data signal adapted to be received by an end-user terminal coupled
2 to a network, the data signal made by steps including:
3 determining a quality of service requirement for the network for a preferred
4 type of information;
5 determining the quality of service delivered by the network with respect to
6 the preferred type of information; and
7 if the quality of service delivered by the network is less than the quality of
8 service requirement, then formulating a status message adapted to instruct
9 the end-user terminal to change a parameter by which it sends information to
10 the network.

1 29. The digital data signal of claim 28, wherein the status message includes a set
2 of digital bits, and wherein a bit in the status message prohibits an end-user terminal

3 from sending a non-preferred type of information to the network, and the
4 complement state of the bit permits an end-user terminal to send the non-preferred
5 type of information to the network.

1 30. The digital data signal of claim 28, wherein the status message includes a set
2 of digital bits, and wherein the set of bits in the status message include a
3 configuration number that instructs the end-user terminal how to send information to
4 the network.

1 31. The digital data signal of claim 28, wherein the status message includes a set
2 of digital bits, and wherein the set of bits in the status message comprise a
3 compression number that instructs the end-user terminal which compression
4 protocol to use to send a type of information to the network.

1 32. The digital data signal of claim 28, wherein the status message includes a set
2 of digital bits, and wherein the set of bits in the status message comprise a
3 bandwidth number that identifies to the end-user terminal the maximum rate at
4 which a certain type of information can be sent to the terminal.

1 33. The digital data signal of claim 28, wherein the status message includes a set
2 of digital bits, and wherein the set of bits in the status message comprise an
3 information type number that specifies a specific type of information to which the
4 rest of the status message pertains.

1 34. A medium storing instructions adapted to be executed by a processor to
2 identify a quality of service requirement for the preferred type of information for a
3 network, determine the quality of service that the network can deliver for the
4 preferred type of information, and if the quality of service that the network can
5 deliver for the preferred type of information is less than the quality of service
6 requirement, then formulating a message to an end-user terminal that instructs the

7 end-user terminal to change a parameter by which it sends non-preferred information
8 to the network.

1 35. The medium of claim 34, wherein the preferred type of information is voice
2 information.

1 36. The medium of claim 34, wherein the preferred type of information is
2 electronic mail information.

1 37. The medium of claim 34, wherein the preferred type of information is world
2 wide web information.

1 38. The medium of claim 34, wherein the quality of service includes a maximum
2 latency.

1 39. The medium of claim 34, wherein the quality of service includes a maximum
2 error rate.

1 40. The medium of claim 34, wherein the parameter that the message instructs
2 the end-user terminal to change is the rate at which the end-user terminal sends non-
3 preferred information to the network.

1 41. The medium of claim 34, wherein the parameter that the message instructs
2 the end-user terminal to change is the compression scheme used by the end-user
3 terminal for a type of information that the end-user terminal sends to the network.

1 42. The medium of claim 34, wherein the parameter that the message instructs the
2 end-user terminal to change is the rate at which the end-user terminal sends preferred
3 information to the network.